

Lead Frequently Asked Questions

What is lead?

Lead is a naturally occurring metal that is harmful if inhaled or swallowed. Lead can be found in air, soil, dust, food, and water.

How can I be exposed to lead?

The most common source of lead exposure is from paint in homes and buildings built before 1978. Lead-based paint and lead-contaminated dust are the main sources of exposure for lead in U.S. children. Lead-based paints were banned for use in housing in 1978.

Although the main sources of exposure to lead are ingesting paint chips and inhaling dust, lead also can be found in some household plumbing materials and some water service lines. The Environmental Protection Agency estimates that 10 to 20 percent of human exposure to lead may come from lead in drinking water. Infants who consume mostly mixed formula can receive 40 to 60 percent of their exposure to lead from drinking water. Metro Water Services ceased using lead pipe around 1955.

What are the risks of lead exposure?

Although lead levels in blood in the United States has declined over the last 50 years, lead can cause a variety of adverse health effects when people are exposed to it. These effects may include increases in the blood pressure of some adults; delays in normal physical and mental development in babies and young children; and, deficits in the attention span, hearing, and learning abilities of children.

How does lead get into my drinking water? Lead is rarely found naturally in our source water or in the treated water flowing through the distribution system. More commonly, lead leaches into water over time through corrosion—a dissolving or wearing away of metal caused by a chemical reaction between water and your plumbing. Lead can leach into water from pipes, solder, fixtures, faucets (brass) and fittings. The amount of lead in your water depends on the types and amounts of minerals in the water, how long the water stays in the pipes, the water's corrosivity, and water temperature. This is one example of why Metro Water Services add a safe corrosion resistant additive to finished drinking water to minimize these effects.

How will I know if my drinking water has lead in it?

Metro Water Services regularly tests the water at a selected number of lead service line locations. Customers residing in these homes are made aware of the results and they are also provided to the TN Department of Environment and Conservation, as required. You can also have your water tested for lead by a certified laboratory. Since you cannot see, taste, or smell lead dissolved in water, testing is the only sure way of telling whether there are harmful quantities of lead in your drinking water.

Is my home at risk for lead plumbing?

The EPA defines potential-risk homes as follows:

- ✓ Homes with a lead service line that connects the water main (located under the street) to your home's internal plumbing.
- ✓ Homes with copper pipe and lead solder built after 1982 and before 1988.
- ✓ Homes with lead pipes.

In 1986, Congress enacted the "lead ban," which stated that not only public water systems, but also anyone else who intends to install or repair drinking water plumbing connected to a public water system, must use "lead free materials." As a result, homes built in or after 1988 are far less likely to have lead solder.

I'm concerned my home may have lead plumbing. How can I find out?

If you're concerned your home plumbing may contain lead pipes (lead is a dull gray metal that is soft enough to be easily scratched with a house key) or if you see signs of corrosion (frequent leaks, rust-colored water), you may want to have your water tested by a state-certified laboratory. Testing is the only way to confirm if lead is present or absent. For more information on testing your water, you can call Metro Water Services at 615-862-4600 or contact a private certified laboratory.

Whose responsibility is it to replace a lead service line?

Metro Water Services owns the service line from the water main to the meter. The property owner is responsible for the service line from the meter to the residence or building. Lead service lines on a customer's property are not part of the public water system and are the responsibility of the property owner. Any work on the customer owned portion of the water service line is the responsibility of the property owner. Metro Water Services strongly advises that you contact a licensed plumber for any work on your service line.

Metro Water Services replaces their portion of lead service lines when found during construction or repair activities.

What is the cost of replacing a lead service line?

Actual cost of replacement reflects a number of factors including the length of the service line, the technique used to install the new service line, and the built environment where the service line is located.

How many lead service lines remain in Nashville?

MWS stopped installing lead pipe in 1955 but insufficient historic record keeping prevents us from knowing an exact number of lead service lines remaining in our system. Lead pipe is replaced when found during repair or other construction activities. It is important to understand that a lead pipe is not the only potential source of lead in water. Homes built prior to 1988 with copper plumbing have the possibility of lead

solder joints. Additionally, brass fixtures including faucets, valves and couplings can contain lead. Again, this is why our corrosion control program is in place.

What is Metro Water Services doing to reduce lead in drinking water?

MWS has had a successful lead monitoring program since 1992. In addition to education and partial service line replacement, MWS feeds a blended phosphate solution to control corrosion in the water distribution system. The combination of ortho/poly phosphate is added to the finished water and reacts to inhibit corrosion of water mains; tie-up nuisance metals; and remove scale deposits in pipes by bonding to the walls of pipes and forming a protective barrier.

How can I reduce my exposure to lead in my drinking water?

There are many steps you can take to reduce your exposure to lead in drinking water, but if you have lead service lines, the best step you can take is to have them replaced in conjunction with Metro Water Services' lead service line replacement plan. In addition:

- ✓ **Run your water to flush out lead.** If it hasn't been used for several hours, run the water for three to five minutes or until temperature change in running water to clear the potential for lead presence. (To conserve water, remember to catch the flushed tap water for plants or some other household use such as cleaning.)
- ✓ **Always use cold water for drinking, cooking, and preparing baby formula.** Never cook with or drink water from the hot water tap. Never use water from the hot water tap to make formula.
- ✓ **Do not boil water to remove lead.** Boiling water will not reduce lead.
- ✓ **Periodically remove and clean the faucet screen/aerator.** While removed, run the water to eliminate debris.
- ✓ **You may consider investing in a home water treatment device or alternative water source.** When purchasing a water treatment device, make sure it is certified under NSF/ANSI 53 to remove lead. Search for certified products at NSF International (800-NSF-8010) or Water Quality Association (630-505-0160). Also make sure that you change any filter(s) on the system per manufacturers recommendations.
- ✓ **Identify and replace plumbing fixtures containing lead.** Brass faucets, fittings and valves may leach lead into drinking water. Products after Jan. 4, 2014, must by law contain very low levels of lead.
- ✓ **Have a licensed electrician check your wiring.** Your home electrical system may be attached to your service line or elsewhere in your plumbing. If this connection is electrified, it can accelerate corrosion. Check with a licensed

electrician to correct ground faults and evaluate your local electric code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper bonding or grounding can cause electrical shock and fire hazards.

Should I test my children for exposure to lead?

Children at risk of exposure to lead should be tested. Your doctor or local health center can perform a simple blood test to determine your child's blood-lead level.

Additional information

Read Metro Water Services' annual consumer confidence report (CCR) to find information about your drinking water.

You can also contact the Metro Health Department or talk to your doctor about reducing your family's exposure to lead.

Hotlines

National Lead Information Center: 1-800-424-LEAD

EPA's Safe Drinking Water Hotline 1-800-426-4791